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comparison, and health economic examples. In the numerical comparison, the valuations of all 243 different EQ-5D states and all pure improvements were compared. In the empirical study, a database of 23,925 individuals was used to identify patient groups that could be influenced by the implementation of experience-based value sets. Two hypothetical health economic examples were used to examine the implication of the choice of value set for decision makers. **RESULTS:** The numerical comparison showed that only three health states were assigned a lower QALY-weight in the experience-based value set. The empirical comparison showed that severe conditions were assigned higher values in case of experience-based value set. Furthermore, the health economic examples showed the choice of a value set has an effect on the health economic result. **CONCLUSIONS:** Shifting to experience-based QALY-weights would increase the estimated level of quality of life in virtually all health conditions. In extension, quality of life enhancing interventions are given higher priority in decision making situations where hypothetical values are used to construct QALY-weights. On the other hand, in situations where experience-based QALY-weights are used, life-prolonging interventions will be prioritised.

RESEARCH POSTER PRESENTATIONS – SESSION I

DISEASE-SPECIFIC STUDIES
DIABETES/ENDOCRINE DISORDERS – Clinical Outcomes Studies

PDB1
HIPOS-ER (HYPOGLYCEMIA IN PORTUGAL OBSERVATIONAL STUDY – EMERGENCY ROOM): OUTCOMES WITH DIFFERENT ANTI-HYPERGLYCEMIC AGENTS

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OBJECTIVES: HIPOS-ER is an observational study to describe the patient population of Type 2 Diabetics treated with an anti-hyperglycemic agent (AHA) and admitted to the emergency room (ER) with a hypoglycemic event. In this analysis we aim to describe the hypoglycemia events by AHA class. **METHODS:** The study enrolled patients from 7 centers in mainland Portugal from Jan 2013 – Jan 2014. Sociodemographic and clinical data were collected at the emergency room and patients who required hospital admission were followed up. Episodes were enrolled consecutively within the sampling period. AHA therapy classes were Insulin - Group 1, secretagogue based - Group 2, oral AHA excluding secretagogue - Group 3 and Insulin+secretagogue – Group 4. **RESULTS:** A total of 238 patients were admitted to the ER with severe hypoglycemia and 105 (44%) were hospitalized. The distribution based on AHA therapy: 55% (131) Group 1, 32% (75) Group 2, 7% (16) Group 3 and 7% (16) Group 4. Previous severe hypoglycemia in the last 12 months was more frequent in Group 1 *vs.* Group 2 (p=0.009). Group 2 patients were more often followed up in Primary Care *vs.* Group 1 (84% *vs.* 48%; p<0.001) and Group 4 (44%, p=0.002). Group 2 patients were more often hospitalized *vs.* Group 1 (71% *vs.* 29%; p<0.001) and Group 4 (31%; p=0.003). There was no difference in terms of the length of stay or hospitalization outcome. 9 deaths occurred: 5 in Group 1, 3 in Group 2 and 1 in Group 3. **CONCLUSIONS:** In the first national study on severe hypoglycemia in Type 2 diabetics, patients treated with Group 2 drugs were followed mainly in Primary care setting. More patients on Group 2 drugs were hospitalized. Within our sample there is little clinical difference in the hypoglycemia events with different therapys besides the need for hospitalization.

PDB2
HIPOS-ER (HYPOGLYCEMIA IN PORTUGAL OBSERVATIONAL STUDY – EMERGENCY ROOM): CLINICAL OUTCOMES IN THE EMERGENCY ROOM

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OBJECTIVES: HIPOS-ER is an observational, cross-sectional, multicenter study to characterize the population of Type 2 Diabetics treated with an anti-hyperglycemic agent (AHA) who were admitted to the emergency room (ER) with a hypoglycemic event. This is the first national ER hypoglycemia study and the first study collecting primary resource data in this setting. Here we aim to describe this population and the hospital management. **METHODS:** The study enrolled patients from 7 centers in mainland Portugal from Jan 2013 – Jan 2014. Sociodemographic and clinical data were collected within the emergency room and patients who required hospital admission were followed-up. **RESULTS:** A total of 238 events were recorded. Mean age: 76 years; average disease duration: 19 years; 58% female; 80.9% were not living alone; 83% no formal education or schooling <4 years; 25% had a previous episode of severe hypoglycemia in the preceding 12 months and 61% were treated in a primary care setting. Regarding drug treatment: 55% on insulin; 32% on a secretagogue; 7% on other oral AHA and 7% on insulin+secretagogue. Missing a meal was the most frequent immediate cause of hypoglycemia (56%). All patients received lab evaluations. 71% underwent radiological procedures. Time spent in the ER was 11 hours (mean) and the average medical and nurse time utilized was 85 and 71 min respectively. AHA therapy was changed in 65% of cases: insulin adjustment (56%) being the most frequent modification. 56% (132) of patients were discharged. **CONCLUSIONS:** Diabetic patients admitted to the ER have several markers of frailty and low educational status. Strategies to mitigate hypoglycemia underline the need to avoid missed meals. ER episodes are lengthy and consume significant physician and nurse time as well as laboratory and other diagnostic procedures. Primary care stakeholders should be involved in actions to mitigate hypoglycemia in type 2 diabetes.

PDB3
REGIONAL ASSESSMENT OF SEVERE HYPOGLYCEMIC COMA EVENTS IN FINLAND

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OBJECTIVES: In a previous study about severe hypoglycemic coma events (SH) among diabetes mellitus (DM) patients we saw regional variation in SH occurrence. The purpose was to compare the incidence of SH between hospital districts in Finland. **METHODS:** This study among type 1 (T1) and 2 (T2) diabetic patients was based on nationwide health care registers. The study cohort contained insulin naïve diabetic patients who had filled at least one prescription of insulin during follow-up in 2006-2009. SH was defined as a hospitalization or a secondary health care visit due to hypoglycemic coma (ICD-10: E10.00 and E11.00). Stratified incidence rates and adjusted hazard ratio (HR) estimates with 95% confidence intervals (CI) were calculated. Analyses were performed for the first and recurrent SHs. **RESULTS:** The population comprised 5271 (17.6%) patients with T1 and 24602 (82.4%) with T2. Altogether 3.1% patients experienced at least one SH during the follow-up. In different hospital districts the rate of first SHs varied from 5.6 (Varsinais-Suomi) to 47.8 (Länsi-Pohja) for T1, and from 4.8 (Pohjois-Karjala) to 50.3 (Länsi-Pohja) for T2. Compared to the capital area, the risks of first SHs varied differently for T1 and T2, but were commonly higher in Länsi-Pohja (T1: HR 3.46, CI 1.41-8.46; T2: HR 1.60, CI 1.13-2.29) and lower in Pohjois-Karjala (T1: no events; T2: HR 0.275, CI 0.14-0.56). Taking all SH events into account did not change these differences remarkably. **CONCLUSIONS:** We found differences between regions in risk of hospital-treated SH in both DM types. Further analyses will be performed for e. g. ambulance density.

PDB4
HIPOS-ER (HYPOGLYCEMIA IN PORTUGAL OBSERVATIONAL STUDY – EMERGENCY ROOM): CLINICAL OUTCOMES IN ADMITTED PATIENTS

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OBJECTIVES: HIPOS-ER is an observational, cross-sectional, multicenter study to describe the patient population of Type 2 diabetics treated with an anti-hyperglycemic agent (AHA) and admitted to the emergency room (ER) with a hypoglycemic event. This is the first national hypoglycemia study in Portugal and the first study collecting hypoglycemia specific resource data directly in this setting. Here we aim to describe the clinical features of hospitalized patients. **METHODS:** The study enrolled patients from 7 centers in mainland Portugal for a period of 12 months (Jan 2013 – Jan 2014). Sociodemographic and clinical data were collected at the emergency room and patients who required hospital admission were followed up. Episodes were enrolled consecutively within the sampling period. **RESULTS:** A total of 238 patients were enrolled, and 105 (44%) were hospitalized and 2 (1%) were transferred outside the hospital center for likely need of hospitalization. Mean age was 78 years, average disease duration was 19 years, 51% were female, 36% were on insulin, 51% on a secretagogue, 9% on an oral AHA excluding secretagogue and 5% on insulin+secretagogue. 26% had complications diagnosed in the ER: Trauma (37%) and Cardiovascular (22%) and Infection/Sepsis (22%) were the most frequent. Mean and median hospitalization time was 9 and 5 days, respectively. Most (95%) patients were admitted to a medical department: Internal medicine (80%) and the ER observation/short stay unit (15%) were the most frequent. 6% of patients were admitted to an intensive care unit. 8% (9) of hospitalized patients died. **CONCLUSIONS:** Hospitalized diabetic patients following an ER episode due to hypoglycemia were treated mainly with secretagogue type drugs. Internal medicine was key in the hospital approach of these patients. The length of stay exceeded the 48-72h typical surveillance period for secretagogue-induced hypoglycemia. Severe hypoglycemia in Portugal is associated with several complications which also include death.

PDB5
COMPARATIVE EFFICACY AND SAFETY OF EMPAGLIFLOZIN WITH OTHER ANTI-DIABETIC DRUGS FOR THE TREATMENT OF PATIENTS WITH TYPE 2 DIABETES MELLITUS WHO ARE FAILING INSULIN

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OBJECTIVES: The aim of the present network meta-analysis is to compare the efficacy and safety of empagliflozin versus other anti-diabetic drugs, in patients with type 2 diabetes mellitus (T2DM) who are inadequately controlled with any insulin treatment and with or without other anti-diabetic drugs (ADs). **METHODS:** We performed a systematic review of randomized controlled trials (RCTs) and Bayesian network meta-analysis to establish the comparative efficacy and safety of SGLT-2s, DPP-4s, GLP-1s and TZDs in T2DM patients. The principal outcome of this analysis was the effect of these drugs on HbA1c, weight, systolic blood pressure (SBP), incidence of hypoglycaemia and urinary tract infections (UTIs) at 24 weeks. **RESULTS:** Sixteen RCTs were included. All patients received insulin treatment (any type) with or without other additional ADs. Compared with placebo, mean changes in HbA1c were -0.51 % [95% confidence interval (CI) -0.93 to -0.11%] and -0.60% [95%CI -1.03 to -0.19%] for empagliflozin 10mg and 25mg, respectively. HbA1c reduction was similar for all other interventions, and no significant differences were detected. Compared with placebo, Empagliflozin 10mg and 25mg significantly reduced patients weight by approximately -1.5kg. Other SLGT-2s and all GLP-1s were associated with a similar weight loss, not change was observed for DPP-4s, and non-significant weight gains were observed for TZDs. Empagliflozin was also associated with significant reductions in SBP, and no significant differences between treatments were detected. For hypoglycaemic events, empagliflozin 10mg and 25mg were associated with non-significant relative risks of 1.03 and 1.23. All interventions had non-significant relative risks of UTIs. **CONCLUSIONS:** Compared with other treatments, empagliflozin